

LEPROSY IN MINNESOTA.

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In Allbut's System of Medicine (Vol. III, p. 46), referring to the Norwegian lepers of Minnesota, Wisconsin and Dakota, it is stated that these have diminished from one hundred and sixty known cases to about a dozen. This statement is undoubtedly taken from the report of Dr. G. A. Hansen, of Bergen, Norway, 1888, who says, "Of about one hundred and sixty lepers who have immigrated into three states (Wisconsin, Iowa, Minnesota), thirteen are alive, whom I have seen myself, and perhaps three or four more. All the others are dead."¹ This statement refers to the *known* lepers that left Norway and settled in the Northwestern States. At another time, Dr. Hansen says: "The number of immigrated lepers from Norway is much greater than I had any idea of from the knowledge I could gather at home. My friends, Dr. Hoegh and Dr. Gronvold, have given me the names of many lepers here in America whom we did not know to be lepers when they left Norway." The figures quoted from Allbut's System therefore refer to those only who were known to be leprous when they left Norway, and are hence misleading as well as incorrect. In 1886, the Minnesota State Board of Health first reported upon the lepers of the state. An attempt has been made since that date, and I think with fair success, to keep a record of all the lepers in the state.

The table on next page will serve as an interesting text.

We have knowledge of fifty-one lepers having resided in Minnesota. Of these, seventeen had died before 1890. Of the thirty-four added to the records since 1890, eighteen were first reported upon in 1891, two in 1892, three in 1893, two in 1894, two in 1897, and seven in 1898 to date (September 15th). Little is known of the nationality of the seventeen who died before 1890, but from various reports it is safe to assume they were all from Norway. Of the later thirty-four, twenty-nine were probably from Norway and five from Sweden. Of the five from Sweden, one was reported first in 1894; the other four in 1898.

Of those who might have belonged to the one hundred and sixty *known* lepers that immigrated from Norway previous to 1888, this

¹ Ch. Gronvold, M. D., Report of July 1st, 1894.

No.	Nationality	Disease Appeared in Europe	DISEASE APPEARED AFTER COMING TO AMERICA													DATE OF		Age	Sex	Married or Single	No. of Children
			1 yr	2 yrs	3 yrs	4 yrs	5 yrs	6 yrs	7 yrs	8 yrs	9 yrs	10 yrs	11 yrs	12 yrs	13 yrs	Birth	Death				
															Over 13 yrs						
1	.....	yes														1831	1880	.....	male	.....
2	.....															1822	1878	.....	male	.....
3	.....		yes									yes				1843	1878	.....	male	.....
4	.....											yes				1846	1876	.....	male	.....
5	.....															1848	1878	.....	male	.....
6	.....	yes			yes											1815	1872	.....	male	.....
7	.....	yes?														1848	1864	.....	male	.....
8	.....															1825	1885	.....	male	.....
9	.....											yes				1839	1885	.....	female	.....
10	.....							yes								1839	1894	.....	male	.....
11	.....								yes							1853	1886	.....	male	.....
12	.....															del.	1818-28	.....	male	married	
13	.....															del.	1848-58	.....	male	.....
14	.....															del.	1829-39	.....	male	married	
15	.....															del.	1858-68	.....	male	single	
16	.....	yes														1849	1890	.....	male	married	
17	.....	yes														1842	1890	.....	male	married	
18	Norwegian								yes							1816	1895	.....	male	single	5
19	Norwegian														yes	1830	1892	.....	male	single	1
20	Norwegian	yes														1840	1896	.....	male	married	5
21	Norwegian	yes														1848	1896	.....	male	single	
22	.....	yes														1820	1894	.....	male	married	78
23	.....														20	1834	1894	.....	male	married	64
24	Norwegian															1857	1894	.....	male	married	6
25	.....	yes														1838	1894	.....	male	married	3
26	.....	yes														1840	1894	.....	male	married	2
27	Norwegian	yes														1843	1897	.....	female	married	3
28	Norwegian	yes														1864	1899	.....	male	married	34
29	.....	yes?			yes											1850	1892	.....	female	married	some
30	Norwegian															1826	1892	.....	female	single	
31	.....															1871	1899	.....	female	single	4
32	.....															1851	1899	.....	female	single	1
33	.....	yes														1852	1899	.....	male	single	
34	Norwegian															1867	1899	.....	male	single	31
35	Norwegian															1867	1899	.....	male	single	46
36	Norwegian	yes														1852	1897	.....	male	married	3
37	Norwegian															1845	1894	.....	female	single	6
38	Norwegian	yes							yes							1845	1897	.....	female	married	2
39	Norwegian	yes?														1860	1897	.....	male	married	
40	.....	?														1865	1897	.....	male	married	38
41	Svede.....								yes							1867	1897	.....	male	married	33
42	Svede.....															1843	1897	.....	male	single	52
43	Norwegian															1861	1897	.....	male	married	37
44	Norwegian							yes								1861	1897	.....	male	married	40
45	Svede.....															1862	1897	.....	female	single	3
46	Svede.....															1862	1897	.....	female	single	6
47	Norwegian	yes														1865	1898	.....	female	married	2
48	Norwegian															1865	1898	.....	male	married	35
49	Svede.....															1865	1898	.....	male	married	1
50	Norwegian	yes														1865	1898	.....	male	married	4
51	Norwegian															1865	1898	.....	male	married	8

list cannot include more than seventeen. There is a possible total of twenty-nine cases in whom the disease first appeared in the old country, but it is not at all probable that more than twenty-two of these were included in Dr. Hansen's list of one hundred and sixty.

Undoubtedly some of those who have reported the disease as first appearing after they had landed in this country have not told the truth. It would be fair, probably, to say that twenty-five of the fifty-one Minnesota lepers had the disease before leaving Europe.

Twenty-one is probably the highest number of lepers known to have been living in Minnesota in any one year (1893). At present, thirteen are known to be living in the state. There may possibly be three more living, from whom we can secure no reports at present, and in addition, a few unrecorded cases.

Of these fifty-one known cases, but nine were females. Of the latest record (34 cases), twenty-one are known to have been married (15 men and 6 women), and twenty of these married lepers had children. It is quite possible that the other one (a woman) had children also. These twenty-one married lepers had from one to eight children. We have knowledge of at least seventy-eight children born to these lepers. It is not known how many of these children were born after the parent was recognized as leprous, but it is safe to say a large proportion of the seventy-eight. Not one of these seventy-eight children has become leprous, and in no case has the leper transmitted the disease to the companion in wedlock. Twenty of these fifty-one lepers are said to have the anæsthetic form of the disease; twenty-three the tubercular form; while for eight the type of disease is not given.

Of the thirteen lepers known to be living, I can give an outline of the present condition of but six, as follows:

No. 43. Mrs. D. Born in Nysaaken Varmlandslan, Sweden. There is no history of leprosy in her family. Her husband, a Norwegian, states that the newspapers have reported a case, or cases, of leprosy near her home in Sweden since she left there. She landed in America (Philadelphia), in 1887, and was married in the fall of the same year at Warren, Minn. The first symptoms of leprosy appeared soon after the birth of her second child in 1891. There was then swelling of the hands, feet and face. On March 24, 1898, inspection showed the following conditions: Hands and feet blue, nodular and swollen; face "leonine"; hair falling out rapidly; eyebrows gone; sore throat; anæsthetic spots on extremities and face. There are sores on her legs and arms received from blows and burns, due to the anæsthetic condition of those parts. She has four children; two born before the first symptoms of leprosy, two since. These are all healthy

and are aged respectively, 9, 6, 4 and 2 years. Patient is careful and cleanly in her habits. She burns all bandages used and has her own special towels, bedding, etc. She sleeps alone. The disease seems to be rapidly progressing.

No. 45. Mr. B. Born in Romsdal, Norway. Aged 55. He gives no history of leprosy in his family, but states that there were lepers near his native home. He landed in America (New York), in 1872. The first symptoms of leprosy appeared in 1874. These were anæsthesia in both hands preceded by severe pains. The ears are slightly nodular. The disease is not progressing rapidly. There is mutilation of the fingers. Patient is not married. His habits are good.

No. 46. Mr. E. Born in Vermland, Sweden. Aged 37. When twenty years of age (1861) he worked on a log drive in Sweden with Norwegians. There is no history of leprosy in his family. He came to America in 1884. Married in 1885 and has two children, aged respectively eleven and eight years, both in good health. In 1892, nodules first appeared on forehead and back. In 1893, face became involved. Disease progressing, but patient is still able to follow his occupation as a tailor. He is careful in his habits.

No. 47. Mr. L. Born in Helsingland, Sweden. Age 40. He knows of no leprosy relations. He landed in America (Boston) in 1881. About 1888 anæsthesia appeared in the feet. Patient is married and has five children (girls), ranging from sixteen to eight years of age; all healthy.

No. 49. Mrs. P. Born in Vermland, Sweden (twenty-five miles from Stockholm). Age 53. She knows of no leprosy relatives or neighbors. About twenty-five years ago she landed in America (Montreal). About twelve years ago she first noticed severe pains in lower limbs. At present, 1898, her hands, feet and face show marked evidence of the disease. She has had six children, four of whom are dead. The two living are aged about sixteen and twelve (both girls), and are healthy and rugged looking. The patient is not cleanly in her habits and if the family escapes infection it will not be due to any precautions taken by her. Her husband fears the disease, and this fear may lead him and his children to protect themselves so far as possible.

No. 51. Mr. J. Born in Norway. Aged 55. He has a brother in the leper hospital in Bergen, Norway. He came to America about twenty years ago and first noticed symptoms of the disease about seven years ago. He is married and has eight children, all healthy.

The history of these six cases gives some idea of the type of leprosy found in Minnesota. It is undoubtedly possible to find such cases wherever people from the Scandinavian Peninsula have settled in the

States or Canada. It is very difficult to secure a clear history of the course of this disease.

Let me draw your attention to a few facts emphasized by this table and these records.

1. The impression that leprous immigrants from the Scandinavian Peninsula are all from Norway is a wrong one. Five of eleven lepers placed on file by our Board during 1897 and 1898 are from Sweden.

2. The feeling that we can quarantine against lepers by watching immigrants is an unsafe one. The family history of all immigrants from a country where leprosy prevails should be secured before they are allowed to embark for America, and no member of a leprous family should be permitted to land upon our shores.

3. It would appear that the conditions antagonistic to the spread of leprosy in Minnesota are also opposed to sterility, as borne out by the families of several of our lepers. (Some of these have children, as shown by the following figures: 5, 5, 6, 6, 4, 6, 4, 5, 8.)

4. It is quite possible for leprosy to die out in certain favored sections of the countries, such as Minnesota, without segregation, *provided* the importation of lepers be discontinued.

5. Even in Minnesota, one has but to visit some of these lepers to feel that segregation *should* be insisted upon in all cases. One cannot but feel, on entering a filthy home and seeing a leprous mother careless in her habits, that the children are not safe.

6. Segregation in single States is not practical. It would tend simply to drive lepers from States enforcing such practice to those that were not carrying out the system.

7. A Federal home should be provided for these unfortunates. They could thus be cared for more economically and more satisfactorily than through any State provision.

8. In spite of all precautions that we may take, there will be some leprous individuals in this part of the world for many years to come.

9. The Scandinavian Peninsula does not furnish all leprous individuals found in the United States.

Finally, great care must be exercised in dealing with lepers in the future. That we have been constantly importing this disease is a recognized fact. That the chances of importing this disease will probably be increased, rather than decreased, unless great care is taken in dealing with infected countries, no one can doubt. All the lepers that come to America do not settle in the Northwestern States, and all sections of the country may not be so fortunate in affording such poor soil for the spread of the disease as does Minnesota.

It is altogether probable that there are some lepers in Minnesota that are not registered by the State Board of Health. Assuming that there may be a total of twenty lepers in Minnesota, it is a safe estimate, based on the United States census for 1890, of the Scandinavian foreign-born population, that there are at least twenty lepers in the four States, Wisconsin, Iowa, South Dakota and North Dakota, and probably one hundred and twenty Scandinavian lepers in other parts of the United States, making a probable total of one hundred and sixty Scandinavian lepers in the United States.

Basing our estimate on what is positively known to exist in Minnesota, the figures for the three divisions given would be, approximately, 13, 13, 78, or a total for the United States of one hundred and four Scandinavian lepers. If we base our estimates on the Norwegian foreign-born population in the United States, we should then have for the three districts a total of probably ninety-one Norwegian lepers.